June 2013
900586-001
Rev 02

FRU Installation Notes
Virtuo Monitor Glass Replacement

Purpose
How to replace the touch screen glass on a Virtuo

Expected time
60 minutes

Audience
- TouchTunes Virtuo Operators
- TouchTunes field service and customer support

This document is for these components or categories

☐	Software
☑	Electrical
☑	Mechanical
☐	Packaging

Overview

This document explains how to replace a touch screen glass, part number 600147-00x, on a Virtuo.

Note: There are two versions of the Virtuo touch screen glass: 600147-001, which only includes mounting holes compatible with Samsung monitors, or the newer 600147-002, which can accept both the original Samsung monitors, and the newer BOE monitors. The two versions can be differentiated by looking at the part number printed on the flag that is wrapped around the cable that connects the glass circuitry to the monitor.

Topics

- Required tools and equipment
- Replacing the glass
- Contacting TouchTunes Technical Support

Required tools and equipment

Have these handy:
- Phillips #2 screwdriver
- cable ties and cable cutters for cable dressing
- protective gloves for handling the glass
- utility knife or boxcutter for trimming foam
- 7 mm. socket wrench or nut driver to remove LCD assembly from Virtuo
- vacuum cleaner

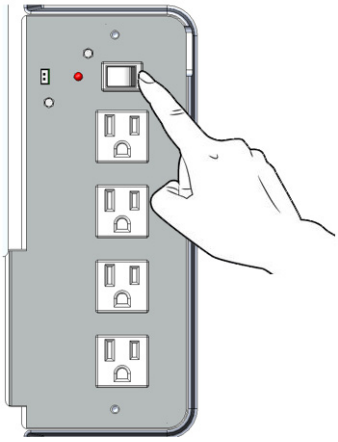
Replacing the glass

IMPORTANT: Before you perform this procedure or any other maintenance on your Virtuo, power it off and disconnect the electrical power from it.

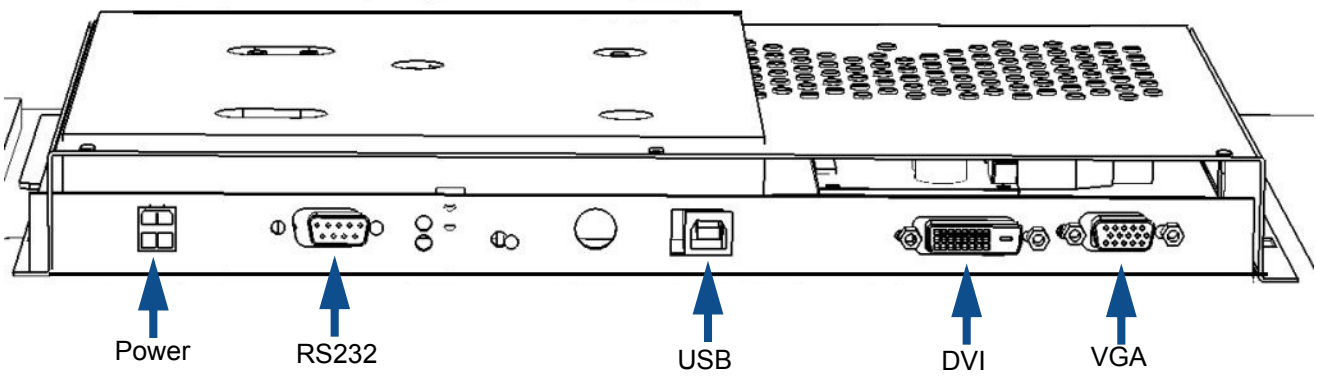
CAUTION: The touch screen glass is heavy (approximately 25 lbs). Enlist the help of an assistant, if possible, when installing the replacement glass.

CAUTION: Use care in handling the old glass, as it can contain sharp and broken pieces. Use care in handling the old glass to prevent debris, markings and fingerprints from contacting the interior surface of the glass and the face of the monitor.

1. Power down the Virtuo by setting the rocker switch on the power strip inside the Virtuo to the OFF (O) position. Remove the power cable from the wall outlet.

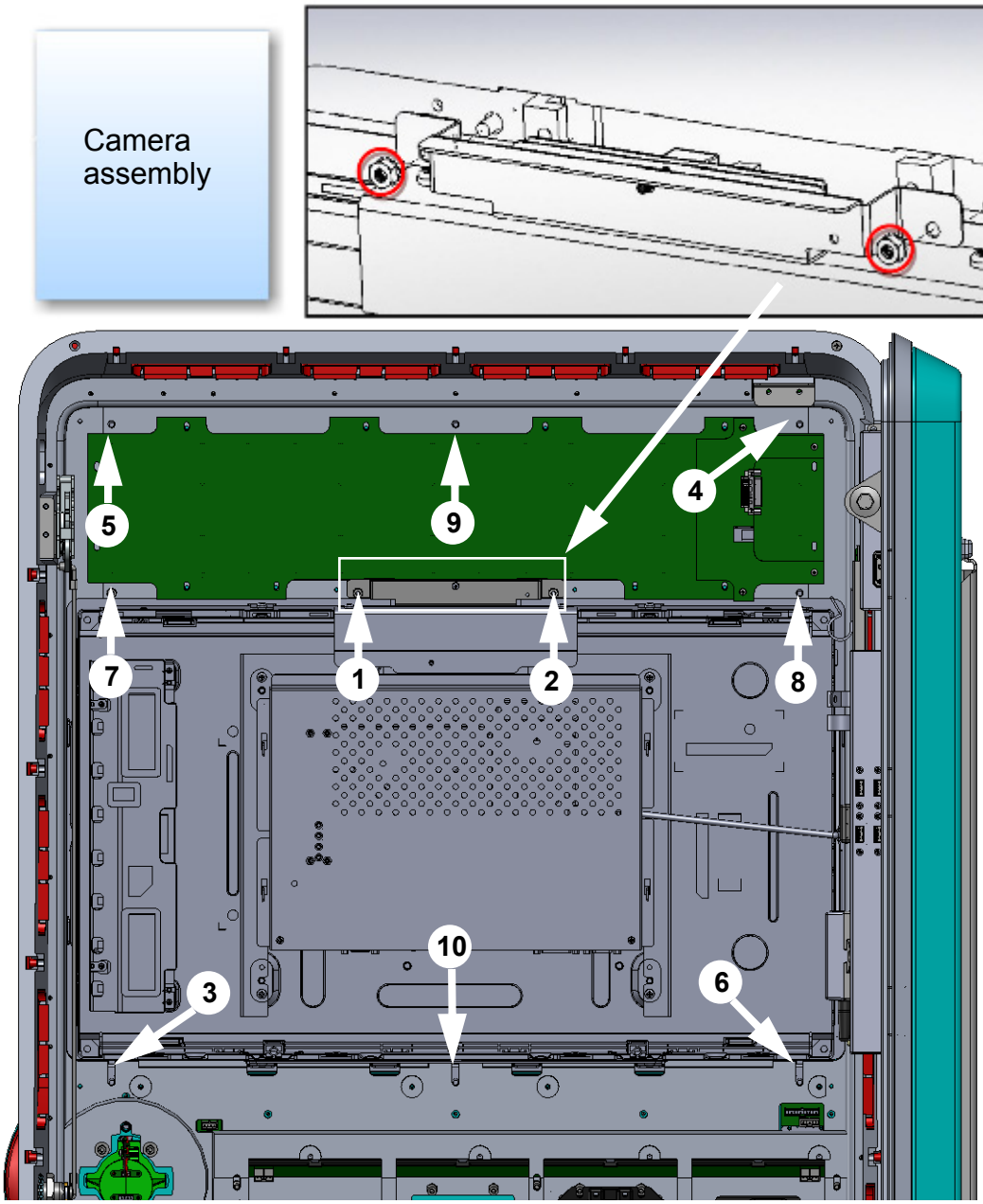


2. The connectors are located on the monitor's bottom panel, as shown in this diagram. Disconnect all of the connectors from the bottom panel.



Bottom view of the touch screen monitor

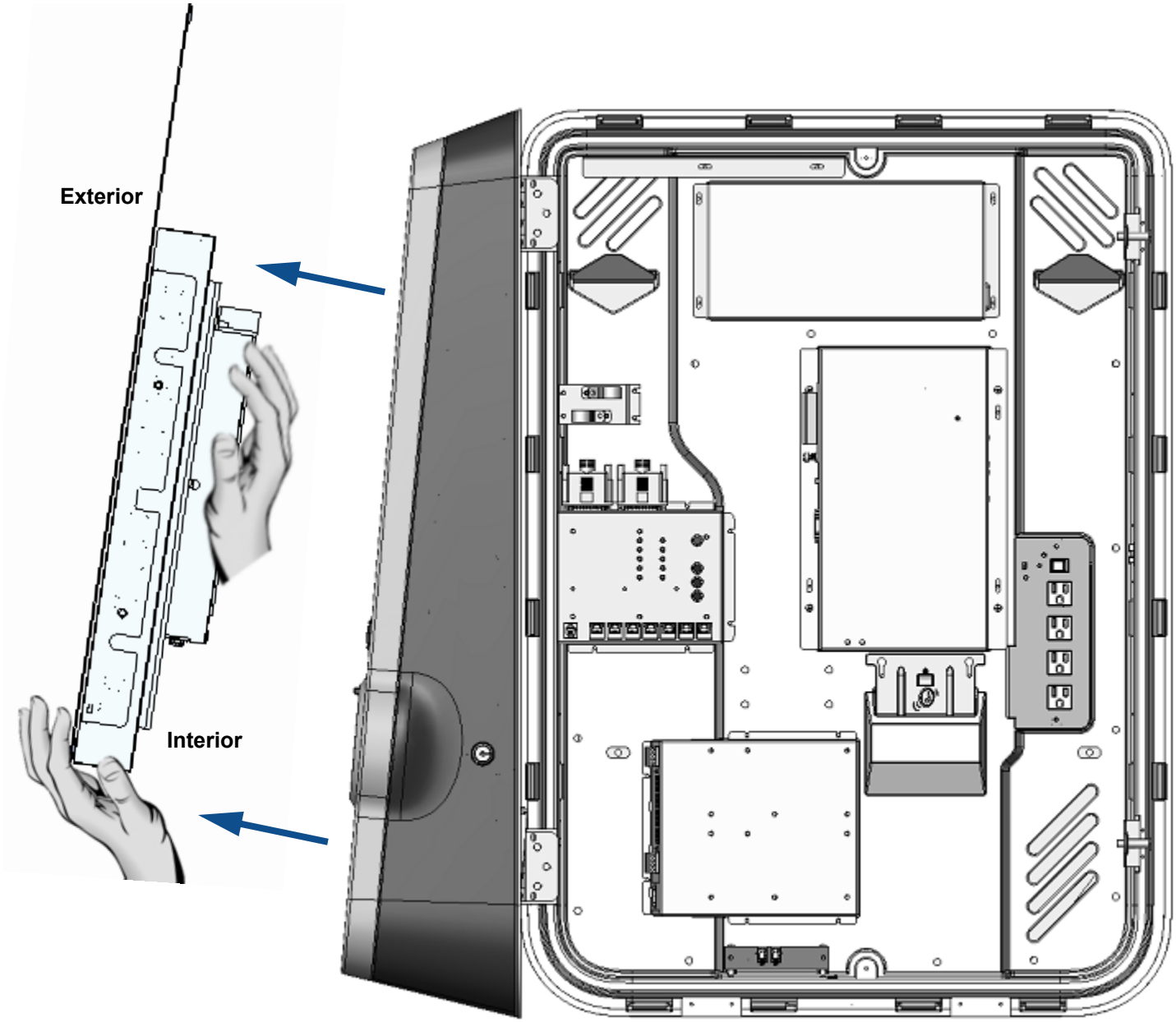
3. The touch screen is secured to the inside of the door with 10x nuts fastened to studs on the rear of the unit, and is removed by lifting it away from the exterior of the Virtuo. Using a ratchet and a socket or nut driver, remove the two nuts that secure the camera assembly from the rear of the monitor.



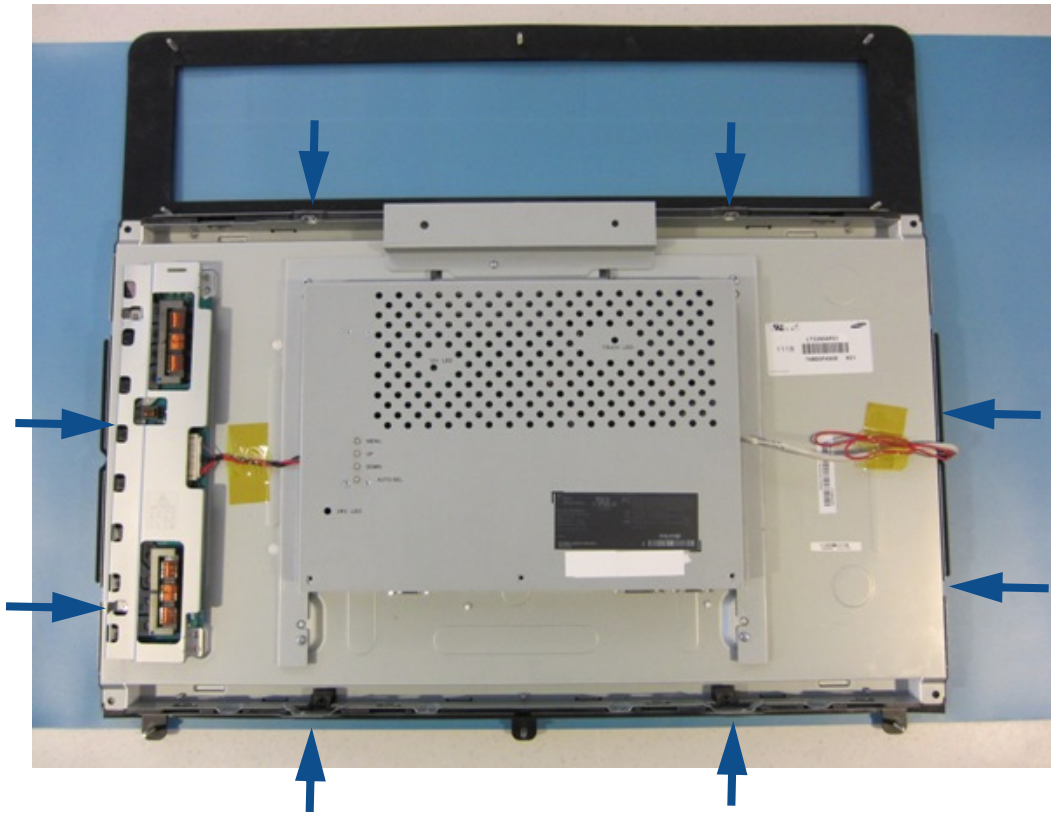
Mounting nut locations, tightening sequence, and detail of camera assembly

4. Disconnect the camera USB cable from its port on the Virtuo computer, and set the camera aside while you install the replacement glass.
5. Remove the remaining 8 nuts from their studs and set them aside.

6. With one hand positioned on the rear of the monitor and the other supporting its front on the exterior, gently push the unit forward and lift it away from the Virtuo and lay it down on a flat surface.

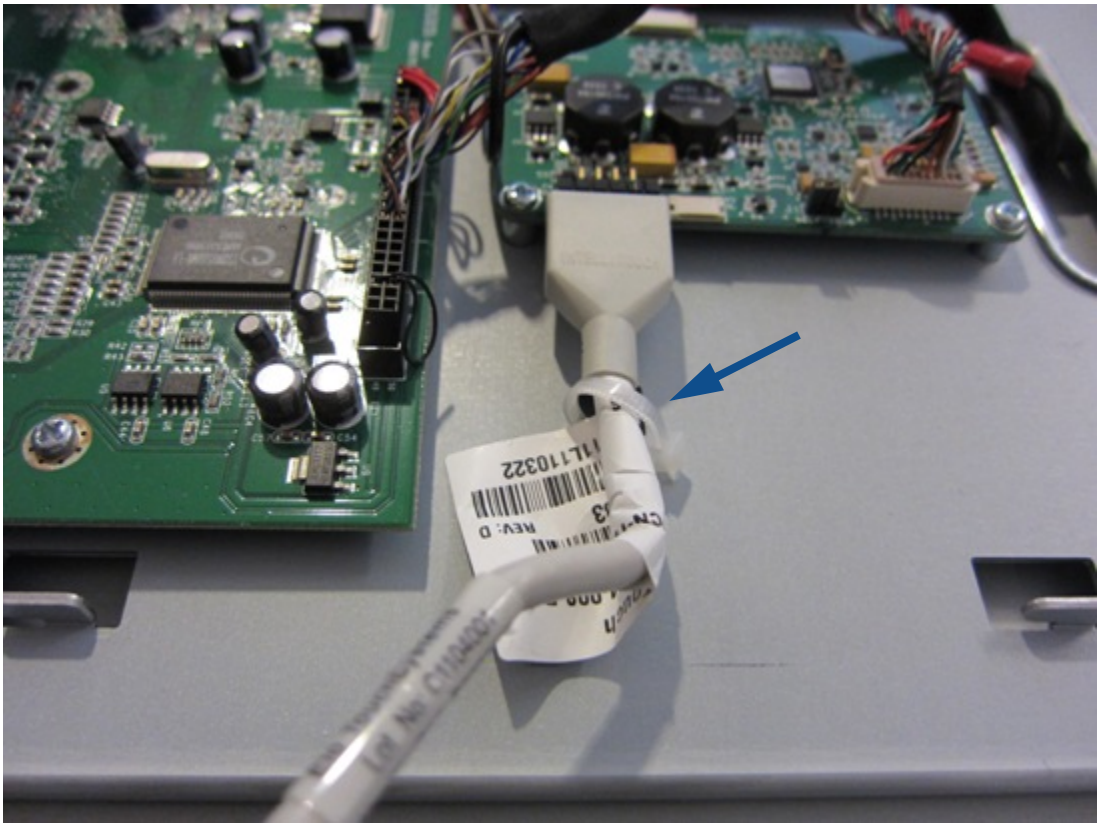


7. Remove the 8 screws, 2 on each side, that secure the LCD and touch screen to the chassis.

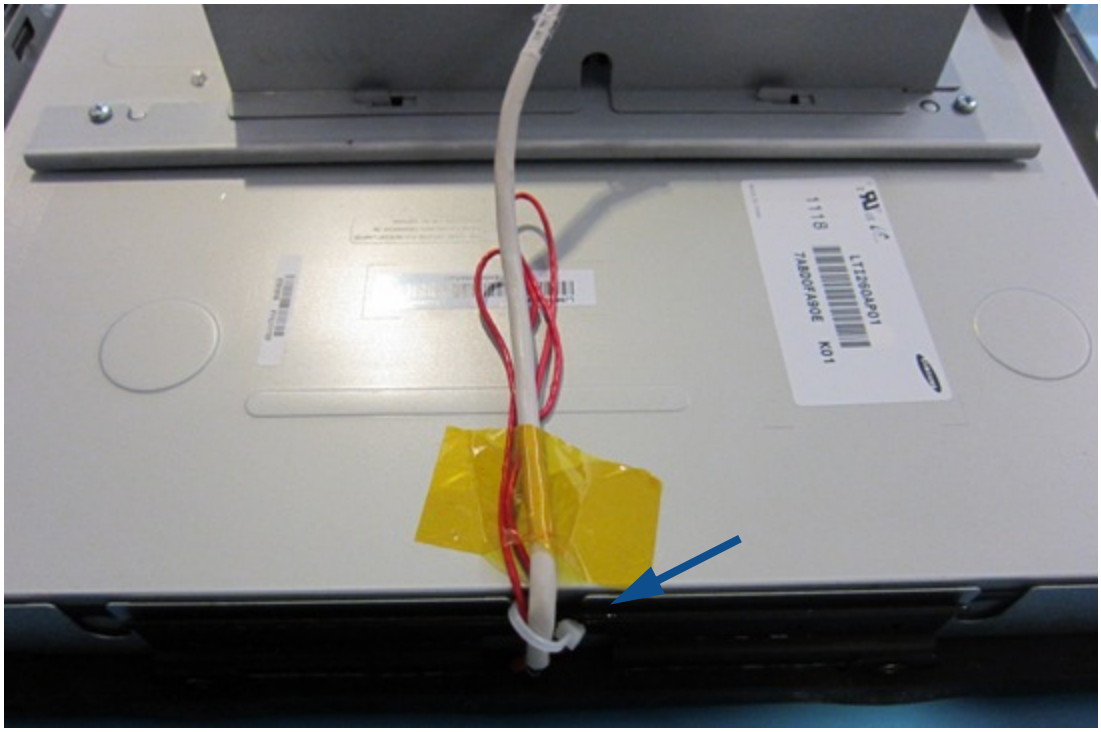


8. Remove the 3 screws that attach the rear panel to the chassis.

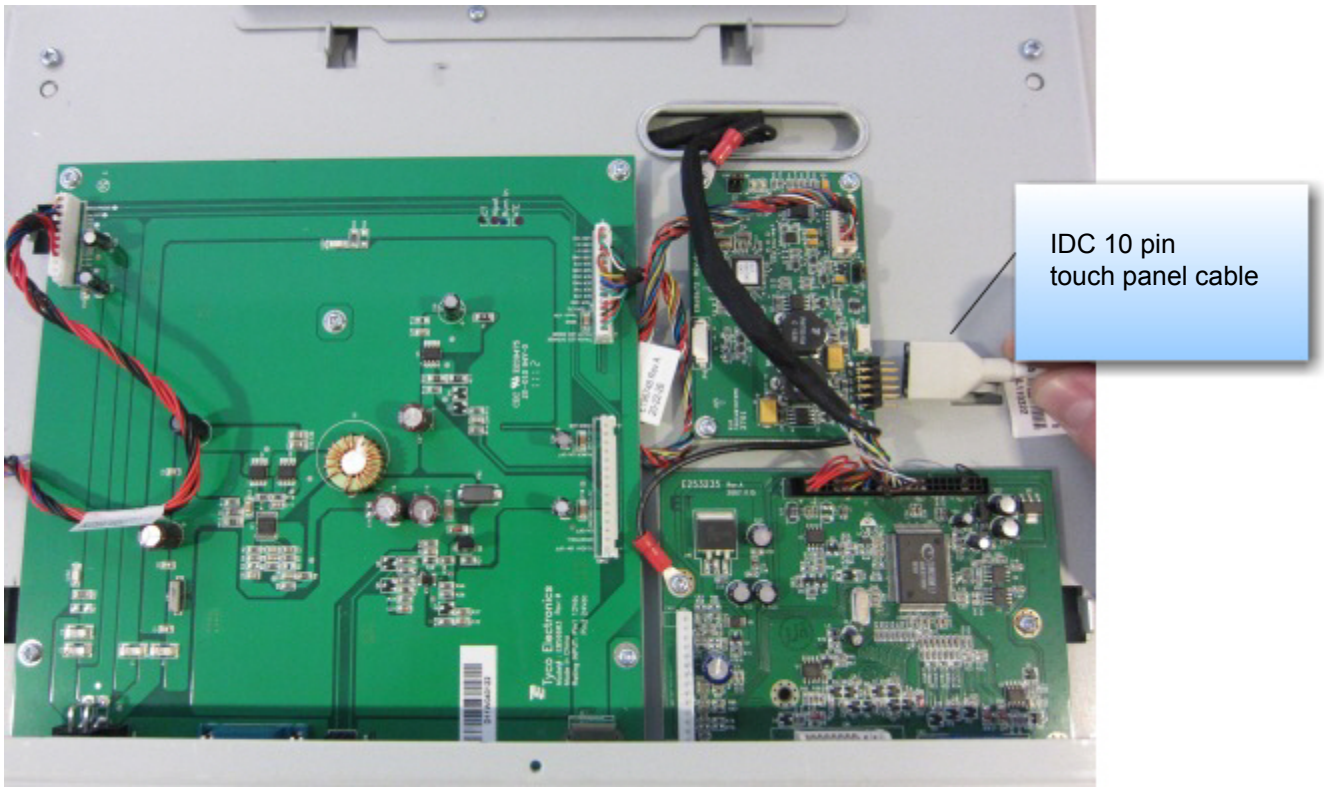
9. Using a tie cutter, remove the tie wrap from the inside housing.



10. Remove the second tie wrap from the outside of the touch panel frame.



11. Disconnect the IDC 10 pin touch panel cable from the touch screen controller.



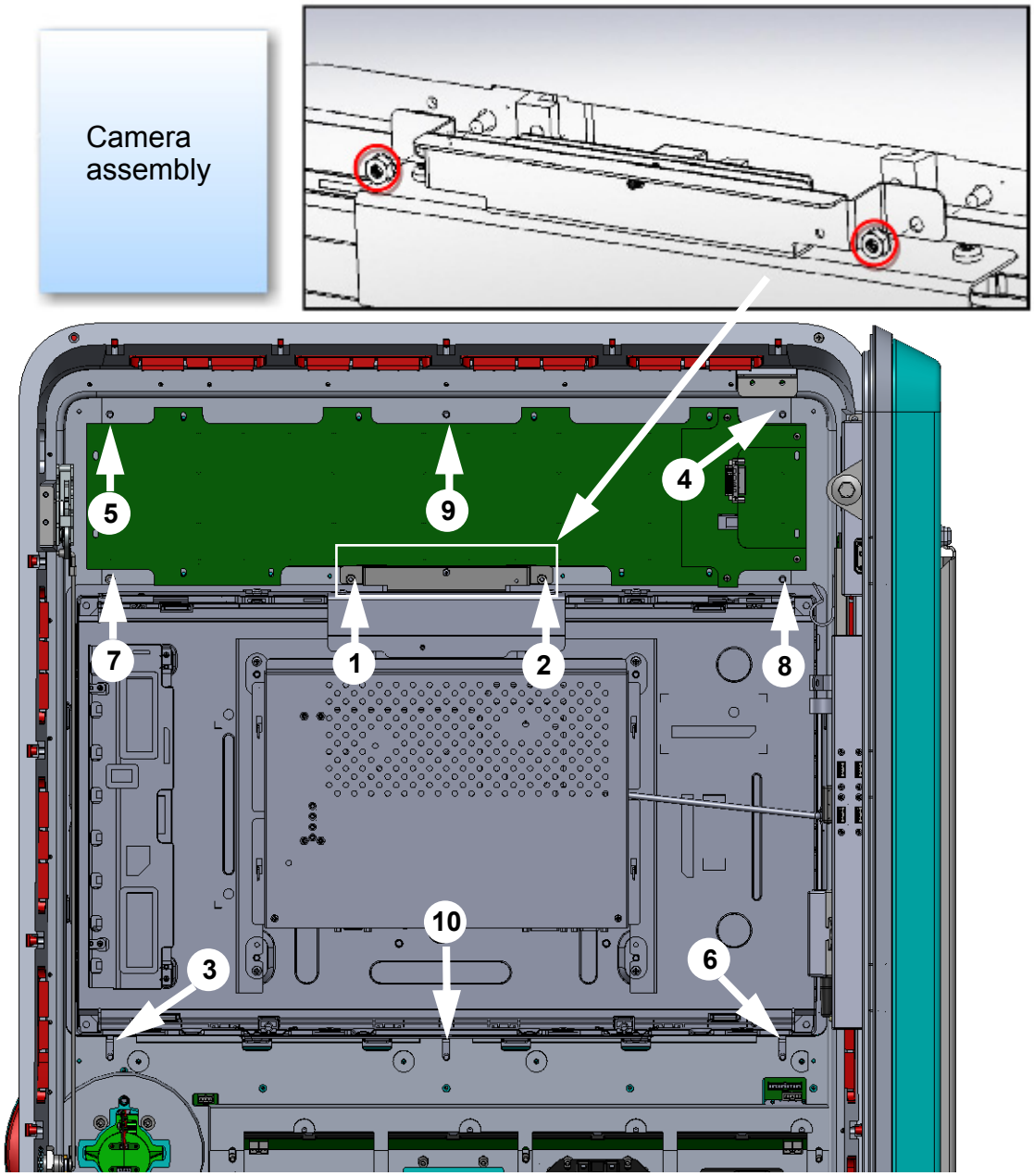
12. Tilt the LCD monitor out and pull the cable to the side, clear of the chassis.
13. Lift the monitor out of the touch panel frame and lay the monitor flat.
    NOTE: We recommend that you wear a pair of protective gloves when performing the next steps, to prevent the monitor and interior of the glass from collecting any debris.
14. Using a vacuum cleaner, remove any glass residue from the LCD monitor and safely dispose of the glass and the frame.
15. On a clean surface, place the new touch panel assembly.
16. Make sure the monitor is clean without scratching it.
17. Insert the LCD monitor in the touch panel frame, connect the cable and dress it as the original one, using a new tie wrap and the original wraps.
18. Reconnect the 3 screws to the rear panel of the chassis.
19. Reconnect the 8 screws that secure the touch glass to the chassis.
20. With one hand positioned on the rear of the monitor and the other supporting its front on the exterior, gently insert the unit into the Virtuo.

IMPORTANT: Ensure the glass is properly seated on the Virtuo.
Failure to do so can cause the glass to break.

IMPORTANT: Do not fold the foam gasket that fits around the touchscreen glass. Lay it out evenly all around. Wait until the glass is fully fastened to the Virtuo before trimming the excess.

21. Re-fasten the nuts (finger-tight) to their studs except for the two nuts for mounting the camera.
22. Fasten the camera assembly to the monitor with the two remaining nuts, and make sure the USB cable is routed toward the right, and realign the camera (finger tight).
23. Reconnect the camera's USB cable to its port on the Virtuo computer, and dress the cables using cable ties.

24. Torque all 10 nuts to 10 in.-lbs.



Mounting nut locations, tightening sequence, and detail of camera assembly

25. Using a utility knife or boxcutter, trim the excess foam from the foam from the foam gasket surrounding the touch glass, being careful not cut the front rim. This must be done when the monitor is installed in the Virtuo.
26. Reconnect the connectors on the monitor's bottom panel.
27. Power on the Virtuo, recalibrate the screen, test the functionality of the monitor, and make sure everything is working before leaving the venue.

Contacting TouchTunes Technical Support

If you need help with or have questions about this document, contact TouchTunes by:

- using the e-mail links on the Contacts page on the TouchTunes Dashboard at https://operator.touchtunes.com
- calling TouchTunes 24/7 Service Hotline at 847-353-1954

To help us assist you more effectively with problem reports, this information may be required when contacting TouchTunes Support:

- Jukebox model, such as Virtuo, Allegro MX-1, Ovation, Maestro II
- Jukebox ID
- PlayPorTT ID (for handhelds) or hardware ID (for towers)
- the serial number of any component you believe to be defective
- the date/time of the problem
- actions performed immediately before the problem occurred
- any additional comments

TouchTunes Interactive Networks, Inc.	**TouchTunes Interactive Networks, Inc.**	**Technical Support**
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